

Women Munition Workers Growing Need

Committee Investigating the Subject Expected to Recommend Adoption of System Similar to England's

By GUY R. CARPENTER.

WITHIN a few weeks a special advisory committee will submit to Secretary of Labor Wilson a report on means of securing an adequate and stable supply of labor for the war industries of the United States. It is the belief of many manufacturers and students of labor conditions in America that the plan must contain provision for the employment of many women in munitions plants. It is known that recommendations will be offered concerning the training of workers and it is believed that an estimate will be made of the part female labor must play in producing the huge shipments of war supplies and munitions which the American army will need.

Secretary of Labor Wilson and Samuel Gompers and other leaders of American labor believe that the supply of male labor is sufficient to meet the nation's war needs. But errors have been made in estimating the nation's needs for sugar, food, coal and war equipment, and it is possible that the resources of the country's male labor have been overestimated and that thousands of women will be needed in munitions factories if the war programme of the country is to be carried through successfully and on time.

Many Places Open.

With new munitions factories opening their doors almost every day and with farmers, shipbuilders, aircraft factories and mills calling for thousands of workers there seems little doubt that many more women will be at work in American factories by the middle of next summer than ever before. Much has been said of late to the effect that American ideals are opposed to the employment of women in munitions factories and that America will get along without their aid. But this view is not supported by experts who have studied labor conditions at first hand in countries like England, France and Italy.

They point out that although America's fighting forces are in proportion to her population far smaller than those of any other nation in the war, the burden of war production in America will be far greater than that of the Allies because America is expected to do the lion's share of the feeding and transporting of war supplies.

When it is remembered that America will be asked this year to man a great merchant marine fleet, that the shipbuilders have asked for a reserve working force of 250,000 men and that eight or nine skilled mechanics must accompany every airplane sent abroad, the steady drain upon the male labor of the country is quickly made apparent.

Sir Stephenson Kent, head of the British War Munitions Commission to America, says:

"America is going to lose man power every day; the supply of man power is going to wane in this country. You will have to make shift with every conceivable sort of substitute for that labor which you must use for the army.

"You must appreciate that to-day an army itself requires another army of mechanics to keep in order the munitions you

supply it. It is very nearly a fact that for every gun we manufacture in England we have to send quite a considerable proportion of the most highly skilled labor that has been engaged on the manufacture of that gun to the front to maintain that gun, to effect repairs, and so on. So that the more you comply with Gen. Pershing's requirements the more difficult your own problems will be."

H. W. Garrod, another member of the mission and a fellow of Oxford, said:

"America is just beginning to feel a shortage of labor, but there is no doubt that soon it will feel that shortage very acutely."

That there has already been a great increase in the number of women employed in munitions factories is well known. While accurate figures are not available, it is believed that at least 25,000 women are working in munitions factories. In 1914 there were only seventy-nine women working on explosives and 3,648 on firearms and ammunition. In the same year there were 1,389,366 women in manufacturing establishments in this country out of about 9,500,000 women engaged in gainful occupations.

That many mechanics who are leaving shell factories for work in armament must be replaced by women seems indisputable. The output of guns will be enormously increased this year. To get an adequate idea of this increase the figures of England are enlightening.

The Showing in England.

Taking England's production of guns for the first year of the war as 1, the production record shows these results: Very heavy guns and howitzers, the first year, 1; second year, 5; third year, 13. Heavy guns and howitzers, first year, 1; second year, 5; third year, 27.

In shell production, basing the output on the weight of munition and using the output of the first year as a unit, the figures are: Very heavy, first year, 1; second year, 21; third year, 220. Heavy, first year, 1; second year, 6; third year, 70. Medium, first year, 1; second year, 5;

third year, 25. Light, first year, 1; second year, 5; third year, 19.

Great Britain entered the war in August, 1914. The number of persons engaged in munitions work in July of last year was 100 per cent. more than in May of 1915. The women increased by 700 per cent. and the men by 50 per cent. There are now more than 1,000,000 women employed in munitions works in England.

Labor leaders of this country oppose the employment of women on the ground that employers will hire them solely on the ground of economy, that they will be underpaid and that through their failure to organize they will not continue the programme for collective bargaining of labor service which the unions have advanced so greatly in recent years.

Wage Problem Met.

In England the wage problem has been satisfactorily met. The Government laid down the rule that wherever a woman was employed upon work previously done by a skilled man she should have the skilled man's rate of pay. It also ruled that any woman employed on piece work should have the rate of the man, and that women doing work not regarded as skilled and employed at a day rate, that is so much per hour, should receive two-thirds the man's rate, because it was found that in the ordinary run of labor it was necessary to replace two men with three women.

Sir Stephenson in reply to a question relating to the organization of the women munitions workers said:

"There is a union of the trades women, and their complaints, if they have any, are very well voiced and very firmly voiced. About 75 per cent. of the munitions workers are organized."

G. H. Baillie, technical expert of the British mission, gave some interesting figures relative to the part women are playing in England's programme of munitions production. He said:

"Our women have done far more than anybody in England expected would be

possible. They are engaged on laboring work in every industry, even under the bad conditions one finds in steel works and blast furnaces. We have them even on such unlikely work as shipbuilding, both ashore and afloat.

"Our shells, fuses and grenades are almost entirely made by women. We have one establishment in which 94 per cent. of the hands are women, and in the machine shop of that plant there is hardly a man to be seen. In general in that class of munitions work about 80 per cent. of the hands are women. In the largest English explosive factory there are 15,000 workers, and of these 11,000 are women.

"Nowadays if any question arises as to the employment of a woman or an unskilled man, no employer will hesitate to employ the woman. She has been found to be quicker in acquiring skill and is far better and faster than the type of man left in the factories.

"The female labor supply in England has not been extensively recruited from the non-working class. It has been taken from the non-essential industries, the small shops, millinery and dressmaking establishments, homes in which the bread winner has been called into the army, and from the servant class. The best age for women who work on munitions is the twenties, especially between 20 and 25.

Decrease in Accidents.

"There has been a substantial decrease in the number of industrial accidents as a result of the employment of women. For instance, the operation of practically all cranes at the present time is done by women, who are more careful and have fewer accidents.

"One factory engaged in picric acid making where two fires have occurred showed rather interesting results. One fire occurred where both men and women were working. The men disappeared and the firemen put out the fire with the help of the women. The other fire occurred in a shop where only men were employed. Those men disappeared. The firemen went to the women's end and the women brought their axes and dealt with the fire."

Brig.-Gen. Johnson on Teaching America to Fight

(Continued from preceding page.)

democracy is learned. The soldier finds that he is well clad, well fed, well treated and that if sick he is cared for; so contentment becomes the rule.

He is compelled to work long and hard—eight hours a day is the average requirement, but the hard work is new, novel, interesting, outdoor, systematic work which requires coordination of body and mind, intelligence, a prompt concept, and which has a logical objective. The result is that coordination, individual and collective, which results in a maximum of effort for the intended purpose.

In addition to this training, which is practical, there is certain mental work in the army. The soldier is taught to think, to plan, to execute, to adapt, to improvise, to lead, to follow, to obey, to resist, to fight, to win.

commissioned officers preparing themselves for duty in command is compulsory, but for the majority is voluntary. In these schools they have an opportunity to improve early educational defects or to extend the knowledge they already possess. In Camp Upton over 1,100 men, many of whom could not speak English when they first came here, are attending English classes, and a very large number in addition are engaged in studying French.

It will thus be seen that the whole tendency of military training is in the line of physical, moral and mental advancement, and there is no question but that it will result in producing a higher type of citizen along all these lines and thus will send into civil life at completion of the training period an aggregation of men who, through the training they received while in the army, will be better citizens, better adapted to civil work and therefore will put on a higher plane the entire body politic.

It will be further seen that the whole training is toward unification; the association of rich and poor working along the same lines will tend to create a better understanding and appreciation of individual worth and the democratization of our people. The discipline and subordination of the individual will develop a respect for law and produce a law abiding citizen, a thing much needed in this land, where license is too often mistaken for liberty, and where there is more crime per capita than in any other civilized country.

We may say, therefore, the army is a national school in which the heterogeneous mass which forms our citizenry becomes a homogeneous whole—American. If the army were disbanded to-morrow every penny which it has cost the nation will have been more than repaid in what has been done through these camps of instruction and schools for the intellectual, moral and physical uplift of our people and the development of national unity in the world. All training tends toward that unity which makes for a common purpose, the effective development of a trained force for the service of our country and the consequent development of a national spirit as a result of such service, in other words—Americanism.

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